Name_____ Date_____

CP Chemistry (Living)
Chapter 1 Study Guide

Use your notes and concept map to answer the following questions.

Define Chemistry

Since chemistry studies matter what is the definition of matter.

What is a physical property of matter? Give some examples.

Define Extensive and Intensive properties.

Classify the following as either a Extensive (E) or an Intensive property (I).

_____ Texture	_____ Length	_____Mass
_____ Density	_____ Volume	_____ Boiling Point
_____ Luster (Shininess)	_____ Melting Point	_____ Specific Heat

What are all the metric units that we have talked about thus far? Draw a chart that will help you remember them.

What units of measurement would you use to measure the following? Pick the best prefix for each measurement as well

Thickness of a staple_____	Distance from school to your house_____
Volume a soda can hold_____	Mass of a car_____

How would you convert between two units. Try the following (show all work)

25 cm =_____km

50g = _____dg

900 hm =_____km

677 L =_____cL

478 g =_____mg

90 dm =_____hm

Define Accuracy and Precision.

Explain whether the following series of numbers are accurate, precise, or both.
Student's mass of object: 78.1 g 78.2 g 78.1 g 78.0 g
Actual mass of object; 70.0 g

What is the formula for percent error? If the volume of an object is actually 520 mL and its volume is measured to be 500 mL, what is the percent error?

A student records the following masses of various samples of aluminum:

Trial 1	Trial 2	Trial 3	Trial 4	Trial 5
6.44 mL	6.30 mL	6.70 mL	6.80 mL	6.55 mL

The average recorded mass is (SHOW WORK WITH UNITS):

The precision of the measurement is: (Note express this using + or – notation)

For the following calculations:

- the volume of a cylinder is $\pi r^2 h$
- the volume of a cube is L x W x H.

The mass of stone was found to be 127.0 g. The initial water level in a graduated cylinder was found to be 5.00 mL, and when the stone was placed inside it rose to 53.0 mL. What is the density of the stone?

A cylinder has diameter of 1.2 cm and a height of 7.0 cm. What is the density of the cylinder if it has a mass of 65.0 g?

A block of copper (D = 8.94g/mL) has a mass of 1500 g. If two of its dimensions are 15cm and 8cm, what is the third dimension?